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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,471	10/04/2001	David Poston	TRCHP0112US	8084

7590 05/19/2004

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EXAMINER

ARSHAD, UMAR

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/830,471	Applicant(s) POSTON ET AL.	
	Examiner Umar Arshad	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2001.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-9 and 13-24 is/are rejected.
 7) ☒ Claim(s) 10-12 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Inventor signatures are missing.

It does not identify the citizenship of each inventor.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 – 4, 9, and 13 - 24 rejected under 35 U.S.C. 102(e) as being anticipated by Adler et al., U.S. Patent No. 5,768,158.

As per claim 1, Adler teaches a method of visually representing in a computer generated graphic image the relationships between single items or groups of data, the method involving:

generating a first elongate ribbon in a form suitable for graphic display in a first visually distinct manner (see Adler, figure 3, item 106; the examiner interprets using horizontal lines for row differentiation as displaying in a first visually distinct manner);

attaching a first item or group of data to said first ribbon (see Adler, figure 3; the examiner interprets the "MSFT" row as a first item or group of data of a first ribbon);

generating a second elongate ribbon in a form suitable for graphic display in a second visually distinct manner (see Adler, figure 3, item 104; the examiner interprets using vertical lines for column differentiation as displaying in a second visually distinct manner);

attaching a second item or group of data to said second ribbon (see Adler, figure 3; the examiner interprets the "Num Shares" column as a second item or group of data of a second ribbon);

generating an intersection for a point at which said first and second ribbons overlap by weaving the two ribbons in a visually distinct form suitable for graphic display (see Adler, figure 3, item 102; the examiner interprets a cell as a visually distinct intersection between first and second ribbons); and,

displaying said first and second ribbons on a display means together with said intersection; wherein said intersection is used to provide a visual indication of a relationship between the first and second items or groups of data that can be readily ascertained by viewing the displayed graphic image (see Adler, figure 3, item 200, column 5, lines 52 – 59 and column 11 lines 34 - 42).

As per claim 2, which is dependent on claim 1, Adler teaches the method of claim 1 (see rejection above). Adler further teaches a method of visually representing data as defined in claim 1, wherein said first ribbon is one of a plurality of ribbons forming a first ribbon group, and said first item or group of data is one of a plurality of first items or groups of data attached to the respective first ribbons in said first ribbon group (see Adler, figure 3; the examiner interprets the rows "MSFT", "IBM" and "SUNW" as a first ribbon group and they represent a plurality of items or group of data).

As per claim 3, which is dependent on claim 2, Adler teaches the method of claim 2 (see rejection above). Adler further teaches a method of visually representing data as defined in claim 2, wherein second ribbon is one of a plurality of ribbons forming a second ribbon group, and said second item or group of data is one of a plurality of second items or groups of data attached to the respective second ribbons in said second ribbon group (see Adler, figure 3; the examiner interprets the columns "Stock", "Num Shares" and "Buy Price" as a second ribbon group and they represent a plurality of items or group of data).

As per claim 4, which is dependent on claim 3, Adler teaches the method of claim 3 (see rejection above). Adler further teaches a method of visually representing data as defined in claim 3, wherein said intersection is one of a plurality of intersections which together with the ribbons form a weave of said first and second ribbon groups (see Adler, figure 3 and column 5, lines 52 - 59; the examiner interprets displaying a plurality of cells in a grid matrix of columns and rows as forming a weave).

As per claim 9, which is dependent on claim 1, Adler teaches the method of claim 1 (see rejection above). Adler further teaches a method of visually representing data as defined in claim 1, wherein each intersection can be generated in one of a plurality of visually distinct forms so as to indicate a plurality of distinct relationships between said first and second items or groups of data (see Adler, column 12, lines 48 – 53).

As per claim 13, which is dependent on claim 4, Adler teaches the method of claim 4 (see rejection above). Adler further teaches a method of visually representing data as defined in claim 4, wherein said weave is one of a plurality of weaves, each weave representing a set of relationships between each first and second items or groups of data of each weave, said weaves forming a map of said sets of relationships (see Adler, column 12, lines 48 – 59).

As per claim 14, which is dependent on claim 13, Adler teaches the method of

claim 13 (see rejection above). Adler further teaches a method of visually representing data, as defined in claim 13, wherein selected ribbons pass from one weave to another, within the same map, each ribbon passing from one weave to another representing the same item or group of data in each weave (see Adler, figure 3; it is inherent that each row represents one stock).

As per claims 15 – 18, they are rejected under the same rationale as claims 1 – 4 respectively, and are rejected under the same rationale as claims 1 – 4.

As per claim 19, which is dependent on claim 18, Adler teaches the method of claim 18 (see rejection above). Adler further teaches a system of visually representing data as defined in claim 18, which includes a means for querying a knowledge base for data to be represented by one of the ribbons (see Adler, column 5, lines 33 – 42 and lines 65 – 67, column 6, lines 62 – 65, and column 7, lines 34 – 38; it is taught that the data related to each cell is stored in memory and correlated to the cell, the examiner interprets this to be a knowledge base).

As per claim 20, which is dependent on claim 19, Adler teaches the method of claim 19 (see rejection above). Adler further teaches a system of visually representing data as defined in claim 19, which includes a means for querying a knowledge base for data to be represented by another ribbon that is to be added to the weave (see Adler, column 7, lines 34 – 38).

As per claim 21, which is dependent on claim 20, Adler teaches the method of claim 20 (see rejection above). Adler further teaches a system of visually representing data as defined, in claim 20, which includes a means for a user to input information to be represented by one of the ribbons (see Adler, column 6, lines 47 – 51).

As per claim 22, which is dependent on claim 21, Adler teaches the method of claim 21 (see rejection above). Adler further teaches a system of visually representing data as defined in claim 21, which includes a means for a user to input information to be represented by another ribbon that is to be added to the weave (see Adler, column 6, lines 47 – 51; it is inherent that the user is queried for multiple objects).

As per claim 23, which is dependent on claim 20, Adler teaches the method of claim 20 (see rejection above). Adler further teaches a system of visually representing data as defined in claim 20, which includes a means for a user to enter the relationship between the said first and said items or groups of data (see Adler, column 5, lines 6 – 16; the examiner interprets a formula as a relationship).

As per claim 24, which is dependent on claim 21, Adler teaches the method of claim 21 (see rejection above). Adler further teaches a system of visually representing data, as defined in claim 21 which includes a means for querying a knowledge base for the relationship between the said first and second items or groups of data (see Adler,

column 6, lines 62 – 65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adler et al., U.S. Patent No. 5,768,158 in view of Glassey, U.S. Patent No. 5,604,854.

As per claim 5, which is dependent on claim 4, Adler teaches the method of claim 4 (see rejection above). Adler does not teach a method of visually representing data as defined in claim 4, wherein said first ribbons are displayed in a different colour from said second ribbons. Glassey teaches wherein first ribbons are displayed in a different colour from said second ribbons (see Glassey, column 7, lines 48 – 52). It would have been obvious to one of ordinary skill at the time of the invention to incorporate the method of Glassey with the method of Adler in order to provide for an improved method of indicating selected rows or columns to a user through the use of contrasting colors.

As per claim 6, which is dependent on claim 5, Adler and Glassey teach the method of claim 5 (see rejection above). Adler further teaches a method of visually representing data as defined in claim 5, wherein said first ribbons overlap one or more of said second ribbons in a substantially perpendicular manner (see Adler, figure 3).

As per claim 7, which is dependent on claim 6, Adler and Glassey teach the method of claim 6 (see rejection above). Adler further teaches a method of visually representing data as defined in claim 6, wherein said plurality of ribbons within a particular ribbon group can be generated with varying degrees of thickness and height dimensions so as to convey additional information about items or groups of data represented in said particular ribbon group (see Adler, column 16, lines 1 – 3).

As per claim 8, which is dependent on claim 7, Adler and Glassey teach the method of claim 7 (see rejection above). Adler further teaches a method of visually representing data as defined in claim 7, wherein said first ribbons are displayed on said display means in a substantially horizontal orientation and said second ribbons are displayed in a substantially vertical orientation (see Adler, figure 3; the examiner interprets rows as first ribbons and columns as second ribbons).

Allowable Subject Matter

Claims 10 – 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art either alone or in combination doesn't teach the limitation for Claim 10 of an intersection taking one or more of the following visually distinct forms: one ribbon passes through a single slit in the other ribbon (over-through-under); one ribbon passes through two adjacent slits in the other ribbon so that the passing ribbon is not visible between the two slit (over-through-under-through-over); or one ribbon passes through two adjacent slits in tile other ribbon so that the passing ribbon is only visible between the two slits (under-through-over-through-under) in combination with the other claimed features.

The prior art either alone or in combination doesn't teach the limitation for Claim 11 of slits made substantially perpendicular to the longitudinal direction of the passing ribbon whereby each of said intersection forms enables one ribbon to be visually dominant in combination with the other claimed features.

The prior art either alone or in combination doesn't teach the limitation for Claim 12 of a single slit made substantially diagonal to the longitudinal direction of both ribbons at the point of overlap so that neither ribbon will be visually dominant in combination with the other claimed features.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umar Arshad whose telephone number is (703) 305-0329. The examiner can normally be reached on Monday - Friday, 9am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L Kincaid can be reached on (703) 308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UA

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